We claim:

1. A method of communicating information between an RFID tag and first and second readers, the method comprising:

controlling a first transceiver of the RFID tag so that the first transceiver communicates with the first reader and so that the first transceiver has substantially longer periods during which the first transceiver is not in communication with the first reader than when the first transceiver is in communication with the first reader; and,

controlling a second transceiver of the RFID tag so that the second transceiver communicates with the second reader at least during the periods when the first transceiver is not in communication with the first reader.

2. The method of claim 1 wherein the controlling of the first transceiver of the RFID tag so that the first transceiver has substantially longer periods during which the first transceiver is not in communication with a first reader than when the first transceiver is in communication with the first reader

comprises receiving infrequent inquiries from the first reader.

3. The method of claim 1 wherein the controlling of the first transceiver of the RFID tag so that the first transceiver has substantially longer periods during which the first transceiver is not in communication with a first reader than when the first transceiver is in communication with the first reader comprises cycling the first transceiver on and off from internal circuitry of the RFID tag.

4. The method of claim 3 wherein the cycling of the first transceiver comprises duty cycling the first transceiver.

5. The method of claim 1 wherein the first transceiver comprises a transmitter and a receiver, and wherein the controlling of a first transceiver comprises controlling the receiver so that the receiver has substantially longer periods during which the receiver is not receiving communications from the first reader than when the receiver is receiving communications from the first reader.

6. The method of claim 5 wherein the receiver comprises a direct sequence spread spectrum RF receiver, and wherein the transmitter comprises a frequency agile RF transmitter.

7. The method of claim 5 wherein the controlling of the receiver comprises duty cycling the receiver.

8. The method of claim 1 wherein the first transceiver comprises a transmitter and a receiver, wherein the controlling of a first transceiver comprises controlling the receiver and the transmitter so that the receiver and the transmitter have substantially longer periods during which the receiver and transmitter are not receiving and transmitting communications from and to the first reader than when the receiver and transmitter are receiving and transmitting communications from and to the first reader.

9. The method of claim 8 wherein the receiver comprises a direct sequence spread spectrum RF receiver, and wherein the transmitter comprises a frequency agile RF transmitter.

10. The method of claim 8 wherein the controlling of the receiver and the transmitter comprises duty cycling the receiver and the transmitter.

11. The method of claim 1 wherein the first transceiver comprises a direct sequence spread spectrum RF receiver and a frequency agile RF transmitter.

12. The method of claim 1 wherein at least some communications between the RFID tag and the first reader are conducted in message frames, wherein each of the message frames comprises a header and a time slot, wherein the header is transmitted by the first reader and contains a frequency, wherein the time slot comprises a header portion and a data portion, wherein the header portion is transmitted by the first reader and also contains the frequency, and wherein the controlling of a first transceiver comprises controlling the first transceiver so as to transmit data from the RFID tag to the first reader in the data portion of the time slot at the frequency.

13. The method of claim 12 wherein the controlling of the first transceiver so as to transmit data from the RFID tag to the first reader comprises pseudorandomly selecting the time slot.

14. The method of claim 1 wherein at least some communications between the RFID tag and the first reader are conducted in message frames, wherein each of the message frames comprises a header and a time slot, wherein the header is transmitted by the first reader and contains a frequency, and wherein the controlling of a first transceiver comprises controlling the first transceiver so as to transmit data from the RFID tag to the first reader in the time slot at the frequency.

15. The method of claim 14 wherein the controlling of the first transceiver so as to transmit data from the RFID tag to the first reader comprises pseudorandomly selecting the time slot.

16. The method of claim 1 wherein at least some communications between the RFID tag and the first reader are conducted in message frames, wherein each of the message frames comprises a header and a time slot, wherein the header is transmitted by the first reader and

contains a hop sequence and a frequency representing a current position in the hop sequence, wherein the time slot comprises a header portion and a data portion, wherein the header portion is transmitted by the first reader and also contains the hop sequence and the frequency representing a current position in the hop sequence, and wherein the controlling of a first transceiver comprises controlling the first transceiver so as to transmit data from the RFID tag to the first reader in the data portion of the time slot at the frequency.

17. The method of claim 16 wherein the controlling of the first transceiver so as to transmit data from the RFID tag to the first reader comprises pseudorandomly selecting the time slot.

18. The method of claim 1 wherein at least some communications between the RFID tag and the first reader are conducted in message frames, wherein each of the message frames comprises a header and a time slot, wherein the header is transmitted by the first reader and contains a hop sequence and a frequency representing a current position in the hop sequence, and wherein the controlling of a first transceiver comprises controlling

the first transceiver so as to transmit data from the RFID tag to the first reader in the data portion of the time slot at the frequency.

19. The method of claim 18 wherein the controlling of the first transceiver so as to transmit data from the RFID tag to the first reader comprises pseudorandomly selecting the time slot.

20. The method of claim 1 wherein the controlling of a first transceiver comprises transmitting data in a time slot pseudorandomly selected by the RFID tag.

21. The method of claim 1 further comprising receiving a reader state from the first reader.

22. The method of claim 21 wherein the reader state indicates that the RFID tag is to operate in a beacon mode.

23. The method of claim 21 wherein the reader state indicates that the RFID tag is to operate in an active communication mode.

24. The method of claim 1 wherein the controlling of a second transceiver comprises controlling the second transceiver of the RFID tag so that the second transceiver communicates with the second reader substantially immediately upon inquiry from the second reader.

25. An RFID tag comprising:

a first transceiver arranged to transmit and receive first signals to and from a first reader; and,

a second transceiver arranged to transmit and receive second signals to and from a second reader.

26. The RFID tag of claim 25 wherein the second signals are of a nature that excludes reception by the first reader, and wherein the first signals are of a nature that excludes reception by the second reader.

27. The RFID tag of claim 25 wherein the first transceiver comprises a frequency agile transmitter and a direct sequence spread spectrum receiver.

28. The RFID tag of claim 25 wherein the first transceiver comprises a long range RF transceiver, and

wherein the second transceiver comprises a short range RF transceiver.

29. The RFID tag of claim 28 wherein the first transceiver comprises a frequency agile transmitter and a direct sequence spread spectrum receiver.

30. The RFID tag of claim 25 wherein the second transceiver comprises a hardwire interface.

31. The RFID tag of claim 25 wherein the second transceiver comprises a magnetic interface.

32. The RFID tag of claim 25 wherein the first transceiver comprises a duty cycled receiver and a transmitter.

33. The RFID tag of claim 32 wherein the duty cycled receiver comprises a duty cycled direct sequence spread spectrum RF receiver, and wherein the transmitter comprises a frequency agile RF transmitter.

34. The RFID tag of claim 25 wherein the first transceiver comprises a duty cycled receiver and a duty cycled transmitter.

35. The RFID tag of claim 34 wherein the duty cycled receiver comprises a duty cycled direct sequence spread spectrum RF receiver, and wherein the duty cycled transmitter comprises a duty cycled frequency agile RF transmitter.

36. The RFID tag of claim 25 wherein the first transceiver is arranged to transmit data in a time slot pseudorandomly selected by the RFID tag.

37. A method of conserving battery power in an RFID tag having a battery, a receiver, and a transmitter, the method comprising:

duty cycling the receiver so that the receiver is turned on during ON times of duty cycles and so that the receiver is turned off during OFF times of the duty cycles;

during the ON times of the receiver, receiving a frequency from a tag reader; and,

transmitting data to the reader at the frequency.

38. The method of claim 37 further comprising receiving a hop sequence during ON times, wherein the frequency is a constituent of the hop sequence.

39. The method of claim 37 wherein the transmitting of data comprises transmitting the data in a time slot pseudorandomly selected by the RFID tag.

40. The method of claim 37 wherein communications between the RFID tag and the tag reader are conducted within a message frame, wherein the message frame comprises a header and a time slot, wherein the header is transmitted by the tag reader and contains the frequency, wherein the time slot comprises a header portion and a data portion, wherein the header portion is transmitted by the tag reader and also contains the frequency, and wherein the transmitting of data comprises transmitting data from the RFID tag to the tag reader in the data portion of the time slot.

41. The method of claim 37 wherein communications between the RFID tag and the tag reader are conducted within a message frame, wherein the message frame comprises a header and a time slot, wherein the header is transmitted by the tag reader and contains the

frequency, and wherein the transmitting of data comprises transmitting data from the RFID tag to the tag reader in the time slot.

42. The method of claim 37 wherein the receiver comprises a direct sequence spread spectrum RF receiver.

43. The method of claim 42 wherein the transmitter comprises a frequency agile RF transmitter.

44. An RFID tag comprising:

a transmitter arranged to transmit first data to a tag reader;

a receiver arranged to receive second data from the tag reader;

a battery;

a switch coupling the battery to the receiver; and,

a controller arranged to operate the switch in a duty cycle such that power is provided by the battery to the receiver during ON times of the duty cycle and such that power from the battery to the receiver is interrupted during OFF times of the duty cycle.

45. The RFID tag of claim 44 wherein the receiver comprises a direct sequence spread spectrum RF receiver.

46. The RFID tag of claim 44 wherein the transmitter comprises a frequency agile RF transmitter.

47. The RFID tag of claim 44 wherein the receiver comprises a direct sequence spread spectrum RF receiver, and wherein the transmitter comprises a frequency agile RF transmitter.

48. The RFID tag of claim 47 wherein the frequency agile RF transmitter is the only transmitter of the RFID tag that transmits long range communications to the tag reader, and wherein the direct sequence spread spectrum RF receiver is the only receiver of the RFID tag that receives long range communications from the tag reader.

49. The RFID tag of claim 47 wherein the direct sequence spread spectrum RF receiver receives a frequency in a hop sequence representing a current frequency state of the tag reader, and wherein the

frequency agile RF transmitter transmits communications to the reader over the frequency.

50. The RFID tag of claim 47 wherein the direct sequence spread spectrum RF receiver is arranged to receive state data indicating that the RFID tag is to operate in a beacon state, wherein the direct sequence spread spectrum RF receiver is arranged to receive state data indicating that the RFID tag is to operate in an active communication state, wherein the frequency agile RF transmitter is arranged to transmit self-originated messages when the direct sequence spread spectrum RF receiver receives state data indicating that the RFID tag is to operate in the beacon state, and wherein the frequency agile RF transmitter is arranged to transmit interrogation replies when the direct sequence spread spectrum RF receiver receives state data indicating that the RFID tag is to operate in the active communication state.

51. The RFID tag of claim 50 wherein the direct sequence spread spectrum RF receiver receives a frequency in a hop sequence representing a current frequency state of the tag reader, and wherein the frequency agile RF transmitter transmits communications to the tag reader over the frequency.

52. An RFID tag comprising:

a transceiver arranged to transmit and receive first signals to and from a first reader; and,

a receiver arranged to receive second signals from a second reader and to activate the transceiver thereby causing the transceiver to transmit and receive the first signals to and from the first reader.